



Enabling the Continuous Improvement of our Surface Navy Fleet Post Shakedown Availability (PSA) by Standardizing Execution Processes

CDR Mike Mehls and Kaitlyn Hines (Herren Associates)

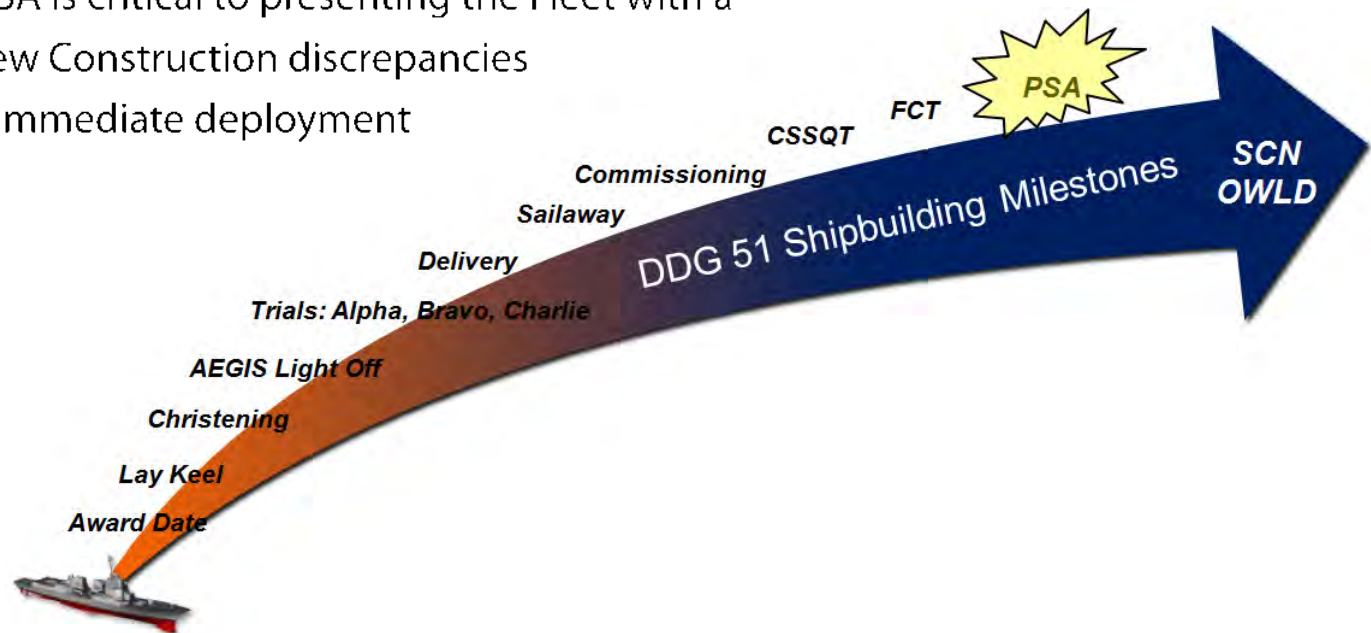
Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE FEB 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE Enabling the Continuous Improvement of our Surface Navy Fleet Post Shakedown Availability (PSA) by Standardizing Execution Processes (BRIEFING CHARTS)			5a. CONTRACT NUMBER		
			5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)			5d. PROJECT NUMBER		
			5e. TASK NUMBER		
			5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Sea Systems Command,PMS 400D6,Washington,DC,20376			8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)		
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Presented at the American Society of Naval Engineers, (ASNE Day), Arlington, VA, February 9-10, 2012					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 16	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Objective

- Identify, Document and Standardize PSA processes
 - Retain expert knowledge regarding PSA processes
 - Assist new employees in executing processes with minimal training / experience
 - Improve awareness of roles and responsibilities of all stakeholders

Introduction

- Post Shakedown Availability (PSA) is the final industrial opportunity to correct ship deficiencies and accomplish authorized work prior to Ship Conversion, Navy (SCN) Obligating Work Limiting Date (OWLD)
 - Before a PSA, many months are allotted for planning and the PSA Work Package is developed
 - During a PSA, deficiencies are corrected and engineering changes are implemented
 - A successful PSA is critical to presenting the Fleet with a Ship free of New Construction discrepancies and ready for immediate deployment

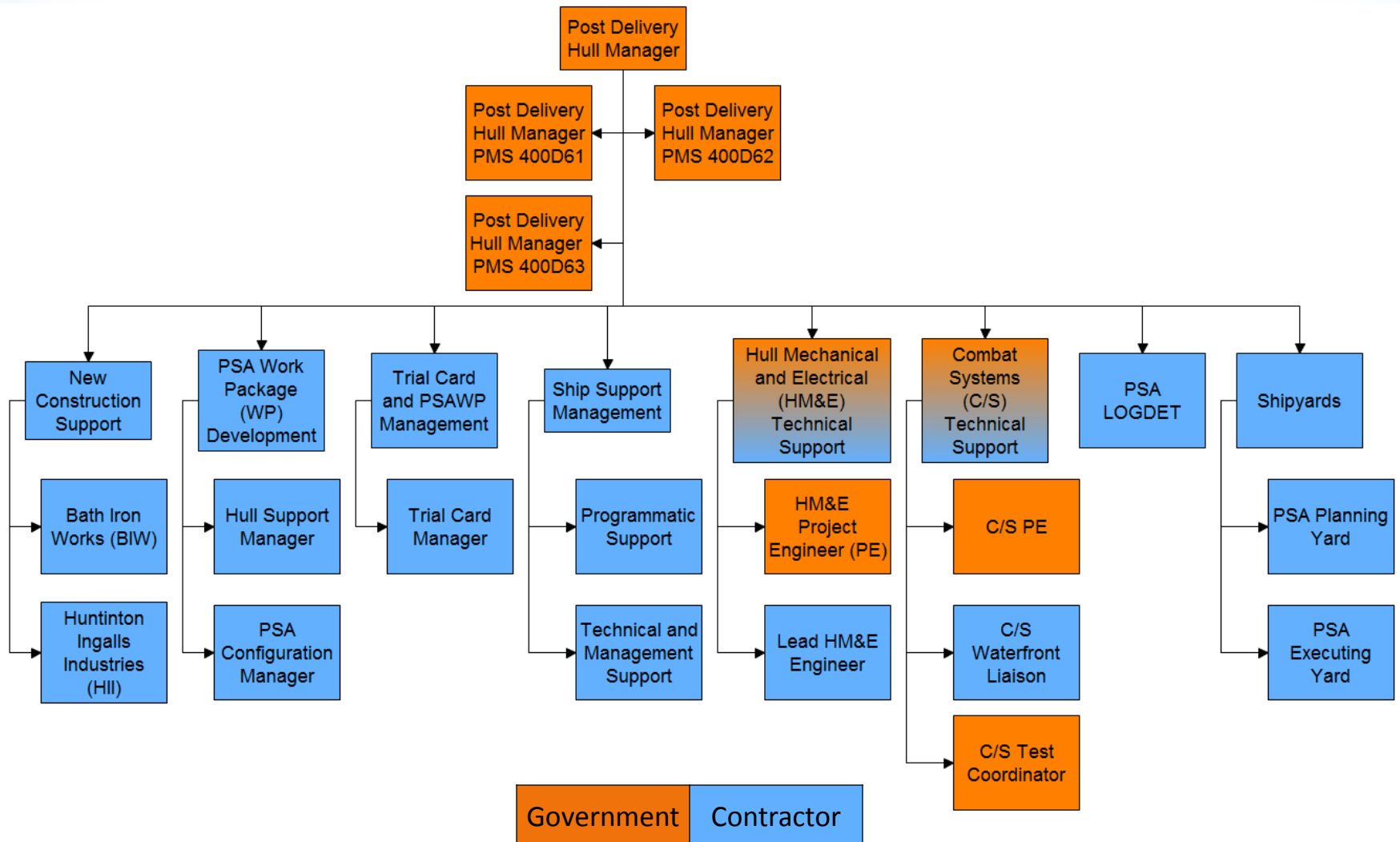


Background

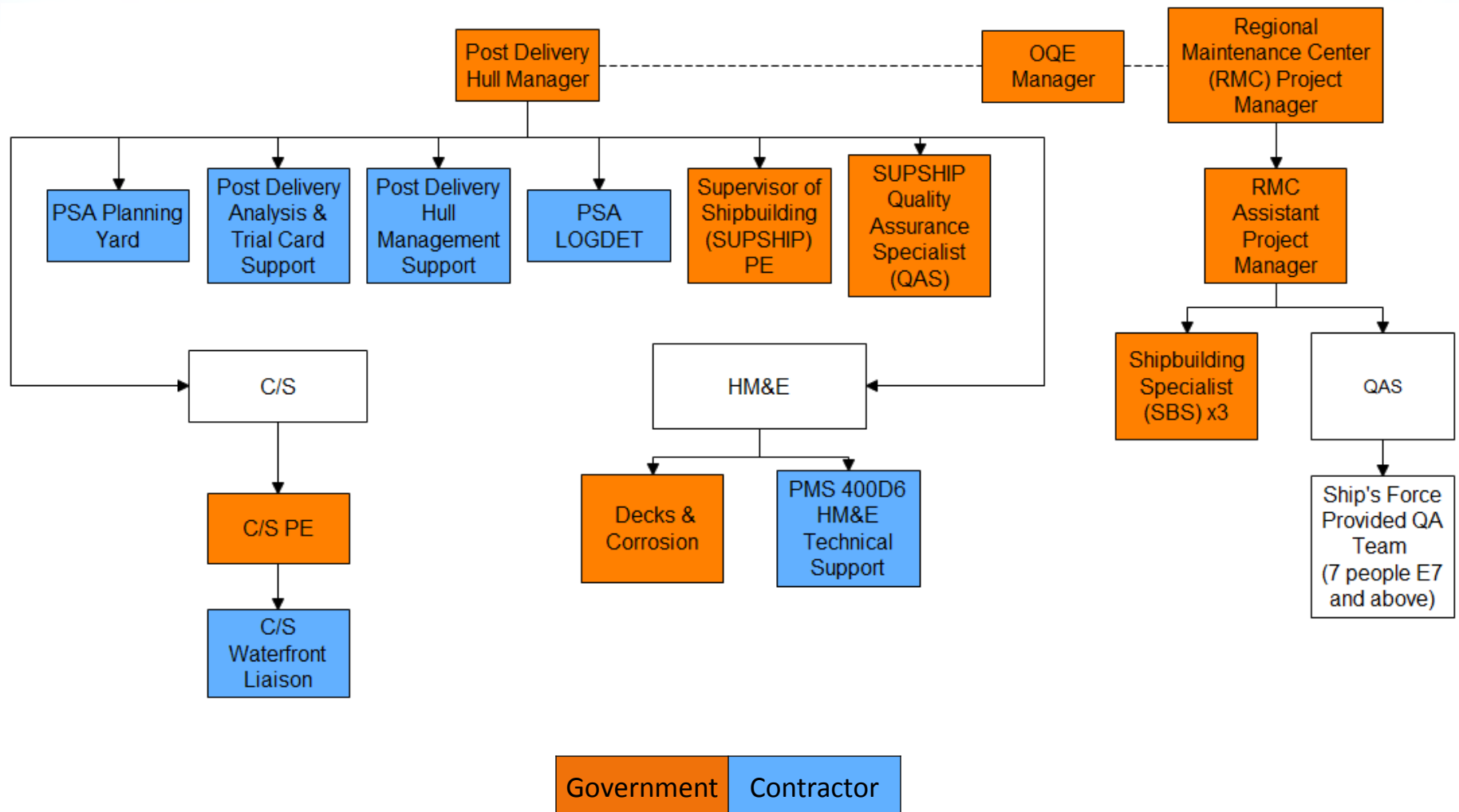
- The Post Delivery period commences with Delivery, continues with PSA, and culminates with a War Ready ship
- The Navy has planned, scheduled, and executed 59 PSAs for Arleigh Burke-class Destroyers (DDG 51 class)
 - The first ship in the class was commissioned in July 1991
 - DDG 51 class is the longest production run of any US Navy surface combatant



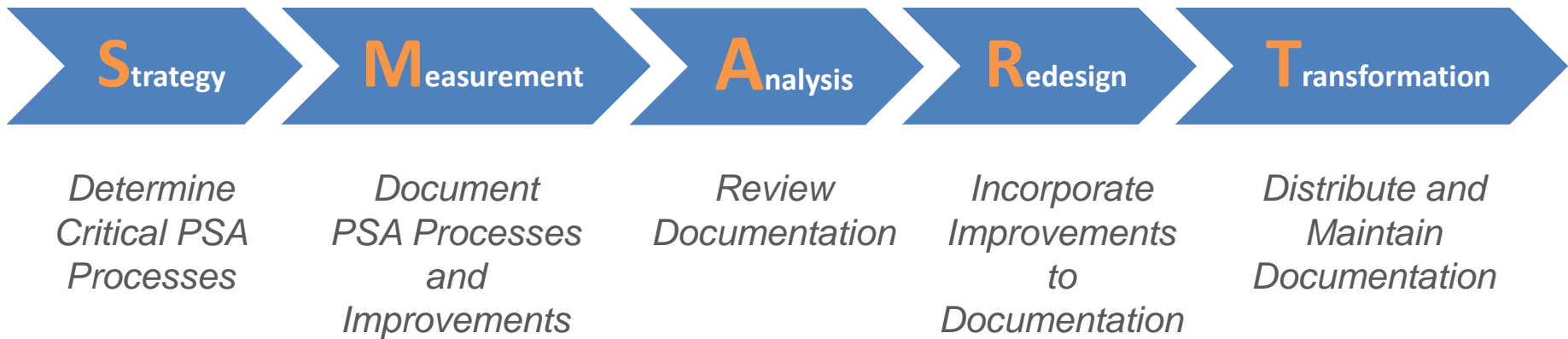
PSA Organizational Chart



On Site Organizational Chart



Project Approach



**Proven industry model was applied to
PSA process documentation and standardization**



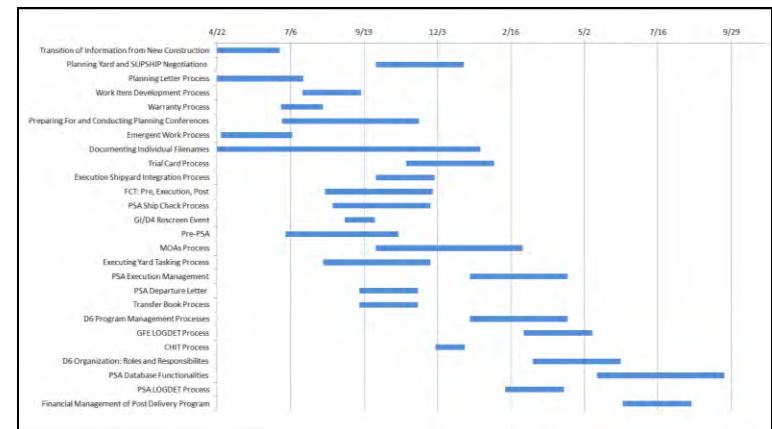
- A Kickoff Event was held Spring 2010 to determine the PSA processes for documentation
- ~30 Stakeholders participated from Government and Industry
- 25 PSA processes were identified for documentation, some of which include:

- | | |
|--------------------------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> D6 Program Management Processes | <input type="checkbox"/> Planning Letter Process |
| <input type="checkbox"/> D6 Organization: Roles & Responsibilities | <input type="checkbox"/> Work Item Development Process |
| <input type="checkbox"/> Transition of Information from New Construction | <input type="checkbox"/> Trial Card Process |
| <input type="checkbox"/> Financial Management of Post Delivery Program | <input type="checkbox"/> PSA Execution Management Processes |
| | <input type="checkbox"/> Managing the PSA Schedule |
| | <input type="checkbox"/> PSA Departure Letter |
| | <input type="checkbox"/> Transfer Book Process |

Strategy: Define strategy to identify and achieve the objectives critical to success



- Created and maintained a Plan of Action and Milestones (POA&M) for events to be held to synchronize a geographically diverse team
- Met with stakeholders to develop process maps and Standard Operating Procedures (SOPs) for each PSA process
- Constructed checklists and report templates for PSA processes to support strategic objectives



Measurement: Identify operational metrics and measure performance against strategic objectives



- After process mapping events, stakeholders reviewed and refined process documentation
 - Allowed for verification and validation of captured process
 - Ensured processes were aligned with PSA mission and objectives
 - Provided insight into true execution of processes, fostering improvement ideas
- Once finalized, the documentation became the basis for standardized PSA execution
 - Agreement amongst all stakeholders

Analysis : Objective analysis in support of operational and strategic decisions

Strategy

Measurement

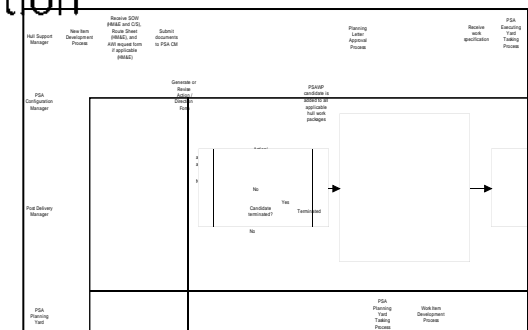
Analysis

Redesign

Transformation

- Stakeholders verified processes real time during PSA execution
 - Using standardized documentation, ensured accuracy of process maps and SOPs and refined as necessary
- Communicated process documentation to broader stakeholder audience
 - Waterfront personnel aided in verification and validation
- Adjudicated feedback and redesigned documentation to create final product

Planning Conference Checklist				
Time	Owner	Step	Action	Complete ?
6-10 Weeks Before	HSM	1	Finalize potential PC dates	<input type="checkbox"/>
	HSM	2	Reference ship's schedule, master cruise schedule, PDM schedule, and prior PC designations to determine dates that may have been determined at previous PC to determine second best dates	<input type="checkbox"/>
	HSM	3	Select PC site	<input type="checkbox"/>
8 Weeks Before	HSM	4	Arrange for hotel rooms (if required by PC site characteristics)	<input type="checkbox"/>
	HSM	5	Obtain a block of 15 rooms at PC site (mostly hotel at the Government Park) and arrange for hotel rooms (if required by PC site characteristics)	<input type="checkbox"/>
	HSM	6	Create Planning Letter and give to SUPSHIP	<input type="checkbox"/>
8 Weeks Before	HSM	7	SUPSHIP will send PSAWP to the PC site	<input type="checkbox"/>
	HSM	8	Update Action Items list with responses to Action Items	<input type="checkbox"/>
	HSM	9	Only review for PC II and PC III	<input type="checkbox"/>
4 Weeks Before	HSM	10	Prepare the PC Agenda	<input type="checkbox"/>
	HSM	11	Agenda will include workshop presentations: PC I - PDM, PSAWP, CSPE, ASAC/CSSE, PSAWP; PC II - those from PC I; and possibly the PSAWP; PC III - those from PC I, and PSA LOGDEF and SUPSHIP or RMC	<input type="checkbox"/>
	HSM	12	Include hotel and security / visit request information	<input type="checkbox"/>
2 Weeks Before	HSM	13	Submit PC Agenda to PDM for approval	<input type="checkbox"/>
	HSM	14	Distribute PC Agenda to PC attendees	<input type="checkbox"/>
	HSM	15	Obtain electronic signature of the PSAWP that the PC Agenda is signed by PDM (should be at least 4 weeks before PC)	<input type="checkbox"/>
2 Weeks Before	HSM	16	Develop PC Presentation	<input type="checkbox"/>
	HSM	17	PC Presentation to the PDM	<input type="checkbox"/>
	HSM	18	Submit PC Presentation to supervisor for approval	<input type="checkbox"/>
2 Weeks Before	HSM	19	Allow one week for several revisions and comments before approval	<input type="checkbox"/>
	HSM	20	Submit PC Presentation to PDM for approval	<input type="checkbox"/>
	HSM	21	Arrange for and facilitate PSAWP Review with key personnel	<input type="checkbox"/>
2 Weeks Before	HSM	22	Finalize PSAWP with TCM	<input type="checkbox"/>
	HSM	23		<input type="checkbox"/>
	HSM	24		<input type="checkbox"/>



Redesign: Identify the key actions, projects, and programs required to achieve objectives



- Two deliverables were created for the standardized PSA processes:
 - “PSA Processes Handbook”
 - Compiled of chapters corresponding to each PSA process
 - Each chapter contains the knowledge and instructions required to understand and perform the process without further documentation
 - “DDG PSA Executive Summary”
 - High level guide defining processes and procedures governing PSA
 - Verbally documents PSA from Delivery through SCN OWLD
- These products were shared with other ship classes and organizations throughout NAVSEA



Transformation: Maintain results by integrating changes into the management process

Deliverables

- All inclusive “PSA Processes Handbook”; 25 documented and standardized PSA processes
 - Deliverables enable PSA team to successfully plan for and execute PSAs
 - Allows for the DDG PSA Program to be leveraged for other ship classes within NAVSEA
- Benefits have included:
 - Aiding in the on-boarding of Government and Contractor personnel
 - Improved awareness of roles and responsibilities of all stakeholders

Proven “SMART” model can be reapplied to promote continuous improvement of PSA Processes

Contact Information

CDR Mike Mehls

PMS 400D6

Michael.Mehls@navy.mil

(202) 781-3979

Kaitlyn Hines

Herren Associates

Kaitlyn.Hines@jlha.com

(202) 609-7291



Back-Up

PSA Processes

- ❑ Transition of Information from New Construction
- ❑ PSAPY & SUPSHIP Negotiations
- ❑ Planning Letter Process
- ❑ Work Item Development Process
- ❑ Warranty Process
- ❑ Preparing For & Conducting Planning Conferences
- ❑ Emergent Work Process
- ❑ Documenting Individual Filenames
- ❑ Trial Card Process (and GI/D4 Rescreen)
- ❑ Managing the PSA Schedule
- ❑ FCT: Pre, Execution, Post
- ❑ PSA Ship Check Process
- ❑ Pre-PSA
- ❑ MOAs
- ❑ Executing Yard Tasking Process
- ❑ PSA Execution Management
- ❑ PSA Departure Letter
- ❑ D6 Program Management Processes
- ❑ GFE LOGDET Process
- ❑ CHIT Process
- ❑ D6 Organization: Roles & Responsibilities
- ❑ PSA Database Functionalities
- ❑ PSA LOGDET Process
- ❑ Financial Management of Post Delivery Program
- ❑ Transfer Book Process